

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1, 4-6, 11, and 14 without prejudice or disclaimer.

Please AMEND 2, 3, 7, 12, 13, and 15 claims in accordance with the following:

1. (CANCELLED)

2. (CURRENTLY AMENDED) ~~A The~~ character recognition method ~~according to claim 1~~ for recognizing characters entered in a document or the like including preprint information, comprising:

dividing an image in an area where the characters to be recognized are present into line segments individually, wherein the image is obtained by reading said preprint information and the entry characters;

creating a recognition image by changing a combination of a plurality of line segments divided;

memorizing a recognition result with reliability by making the character recognition for said created recognition image; and

outputting the recognition result having a greatest reliability by making the character recognition for all the combinations while changing said combination of line segments successively,

wherein the division into said line segments comprises ~~the steps of:~~

thinning all the line segments in the image within said recognition area;

extracting an endpoint and an intersection from said line segments;

dividing said thinned image into line segments from said endpoint to said intersection, said endpoint to said endpoint, or said intersection to said intersection,

wherein each of said line segments is extended to the original line width by referring to said input original image.

3. (CURRENTLY AMENDED) ~~A The~~ character recognition method ~~according to claim 1~~ for recognizing characters entered in a document or the like including preprint

information, comprising:

dividing an image in an area where the characters to be recognized are present into line segments individually, wherein the image is obtained by reading said preprint information and the entry characters;

creating a recognition image by changing a combination of a plurality of line segments divided;

memorizing a recognition result with reliability by making the character recognition for said created recognition image; and

outputting the recognition result having a greatest reliability by making the character recognition for all the combinations while changing said combination of line segments successively,

wherein when the combination of said plurality of divided line segments is changed, it is checked whether or not there is connectivity in said combination, in which if there is no connectivity, no recognition is made for said combination, and only if there is connectivity, a recognition image for said combination is created to make the character recognition.

4. - 6. (CANCELLED)

7. (CURRENTLY AMENDED) The character recognition method according to claim 4 2, wherein when said character recognition result is a character registered as having a high possibility of false recognition so that the character recognition results is determined to be any ~~for other~~ character pattern, said character recognition result is exchanged by one of said other ~~character~~ characters determined by the false recognition, if there is any recognition candidate obtained for said other character in a process of performing the character recognition while changing said combination of line segments.

8. (ORIGINAL) The character recognition method according to claim 7, wherein said character recognition result is exchanged only if the reliability of character recognition for said other character is greater than or equal to a preset fixed value.

9. (ORIGINAL) The character recognition method according to claim 7, wherein said character recognition result is exchanged only if any line segments of said character recognition result are included in the line segments constituting a character recognition candidate of said other character.

10. (ORIGINAL) The character recognition method according to claim 7, wherein said character recognition result is exchanged only if the reliability of character recognition for said other character is greater than or equal to a preset fixed value, and any line segments of said character recognition result are included in the line segments constituting a character recognition candidate of said other character.

11. (CANCELLED)

12. (CURRENTLY AMENDED) A computer-readable storage recording medium storing a computer-readable program which controls a computer system to execute character recognition by storing a program, comprising the functions of:

dividing an image in an area where characters to be recognized are present into line segments individually, wherein the image is obtained by reading the characters entered in the document or the like including preprint information;

creating a recognition image by changing a combination of said plurality of line segments divided;

memorizing a recognition result with reliability by making the character recognition for said created recognition image; and

outputting the recognition result having a greatest reliability by making the character recognition for all the combinations while changing said combination of line segments successively,

wherein when said output character recognition result is a character registered as having a high possibility of false recognition so that the character recognition results is determined to be any for other character pattern, said character recognition result is exchanged by one of said other character characters determined by the false recognition, if there is a recognition candidate obtained for said other character in a process of performing the character recognition.

13. (CURRENTLY AMENDED) The character recognition method according to claim 4 2, wherein in the case where a region for entering the character to be recognized in the image within the recognition area is predetermined, the line segments within the region for entering the character are necessarily included, when the combination of plural line segments divided is changed.

14. (CANCELLED)

15. (CURRENTLY AMENDED) The character recognition method according to claim 4 2, wherein only if the size of a graphic created by the combination of plural divided line segments is within a predetermined range, the character recognition is performed, while if it is outside the predetermined range, the character recognition is omitted.

16. (NEW) The character recognition method according to claim 3, wherein when said character recognition result is a character registered as having a high possibility of false recognition so that the character recognition results is determined to be any other character pattern, said character recognition result is exchanged by one of said other characters determined by the false recognition, if there is any recognition candidate obtained for said other character in a process of performing the character recognition while changing said combination of line segments.

17. (NEW) The character recognition method according to claim 16, wherein said character recognition result is exchanged only if the reliability of character recognition for said other character is greater than or equal to a preset fixed value.

18. (NEW) The character recognition method according to claim 16, wherein said character recognition result is exchanged only if any line segments of said character recognition result are included in the line segments constituting a character recognition candidate of said other character.

19. (NEW) The character recognition method according to claim 16, wherein said character recognition result is exchanged only if the reliability of character recognition for said other character is greater than or equal to a preset fixed value, and any line segments of said character recognition result are included in the line segments constituting a character recognition candidate of said other character.

20. (NEW) The character recognition method according to claim 3, wherein in the case where a region for entering the character to be recognized in the image within the recognition area is predetermined, the line segments within the region for entering the character are necessarily included, when the combination of plural line segments divided is changed.

21. (NEW) The character recognition method according to claim 3, wherein only if the size of a graphic created by the combination of plural divided line segments is within a predetermined range, the character recognition is performed, while if it is outside the predetermined range, the character recognition is omitted.

22. (NEW) A computer-readable storage recording medium storing a computer-readable program which controls a computer system to execute character recognition by dividing an image in an area where the characters to be recognized are present into line segments individually, wherein the image is obtained by reading said preprint information and the entry characters;

creating a recognition image by changing a combination of a plurality of line segments divided;

memorizing a recognition result with reliability by making the character recognition for said created recognition image; and

outputting the recognition result having a greatest reliability by making the character recognition for all the combinations while changing said combination of line segments successively,

wherein the division into said line segments comprises:

thinning all the line segments in the image within said recognition area;

extracting an endpoint and an intersection from said line segments;

dividing said thinned image into line segments from said endpoint to said intersection, said endpoint to said endpoint, or said intersection to said intersection,

wherein each of said line segments is extended to the original line width by referring to said input original image.